



***METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY***

OFFICE OF INTERNAL AUDIT

Professional Audit and Advisory Service

FINAL REPORT

**Audit of the Davidson County Election Commission
July 1, 2010 through December 31, 2012**

Date Issued: April 17, 2013

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The Metropolitan Nashville Office of Internal Audit is an independent audit agency reporting directly to the Metropolitan Nashville Audit Committee

EXECUTIVE SUMMARY

April 17, 2013

The Metropolitan Nashville Office of Internal Audit performed an audit of the processes and controls in place at the Davidson County Election Commission. Subsequent to the start of this audit project, the Coordinator of Elections for the Tennessee Secretary of State initiated a review of Davidson County Election Commission practices. A separate special report addressing specific concerns not included in the scope of this audit will be forthcoming from the Coordinator of Elections.

Results in Brief	Key Recommendations
<p><u>Election Process</u></p> <ul style="list-style-type: none"> • <i>Were controls to ensure the integrity of the election process efficient and working as management intended?</i> <p>Yes. The Office of Internal Audit staff attended poll worker training, reviewed controls surrounding voter registration, voter machine maintenance, security, and election canvassing. Controls were in place and working as management intended.</p> <p><u>Fiscal Resources</u></p> <ul style="list-style-type: none"> • <i>Were the procedures followed in the procurement of the 440 electronic poll books in compliance with Metro Nashville Purchasing Code and Regulations?</i> <p>Generally yes. The procurement and contract development process was followed for the purchase. However, purchase orders were not used prior to shipment of goods. • <i>Were fiscal resources such as personnel time, operational expenditures, and capital and tracked assets being managed?</i> <p>Generally yes. A review of payroll, timekeeping, purchasing, and procurement card transactions showed that management of the Davidson County Election Commission were being good stewards of funds appropriated to support election activities. • <i>Have previous audit recommendations from the Tennessee Comptroller's Division of County Audit report <u>Limited Review of Information System Controls</u> dated June 8, 2008, been implemented?</i> <p>Generally no. A review of the status of implementation showed that only two out of the seven accepted recommendations were implemented.</p> </p></p>	<p><u>Election Process</u></p> <ul style="list-style-type: none"> • Continue the practice of self-evaluation and improving the election processes by reviewing election risks along with opportunities for improvement. • Enhance information security practices. <p><u>Fiscal Resources</u></p> <ul style="list-style-type: none"> • Use purchase order to request goods and services. • Verify invoice rates against contract schedules. • Ensure procurement card purchase policy guidelines are followed. • Ensure the staff responsible for hiring poll workers is not also responsible for poll worker payroll processing. • Maintain capital and valuable equipment listings. <p>Management's response can be seen in Appendix A, page 29.</p>

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INTRODUCTION

Audit Initiation

Members of the Metropolitan Nashville Council requested an audit of the Davidson County Election Commission after errors were observed with the implementation of electronic poll books at the August 2012 primary election. The audit request was approved by the Metropolitan Nashville Audit Committee on September 25, 2012, and was agreed to start after the completion of the November election in December 2012. Subsequent to the start of this audit project, the Coordinator of Elections for the Tennessee Secretary of State initiated a review of similar matters of concern. The Office of Internal Audit coordinated efforts with the Coordinator of Elections Office throughout the course of this audit. A separate report addressing specific concerns not included in the scope of this audit will be forthcoming from the Coordinator of Elections.

Background

The United States Congress has authority under the Constitution to regulate presidential and congressional elections and to enforce prohibitions against specific discriminatory practices in all federal, state, and local elections. At the state level, individual states are responsible for the administration of both federal and their own elections. States regulate the process, including for example, the adoption of voluntary voting system guidelines, the state certification and acceptance testing of voting systems, ballot access, registration procedures, absentee voting requirements, the establishment of voting places, the provision of Election Day workers, and the counting and certification of the vote. Election policy and procedures are legislated primarily at the state level, with administration of the election process carried out by the Davidson County Election Commission.¹

Administering an election is a year-round process involving the following stages:²

- *Voter registration.* Election officials register eligible voters and maintain voter registration lists using the *Election Systems and Software MegaProfile* system. This includes assigning voters to voting precincts based on voter declared residency.
- *Election administration.* Election officials review and qualify candidate petitions, prepare for various elections by arranging for polling places, recruit and train poll workers, design direct recording electronic touch screens, optical scan, and audio ballots, prepare and test voting equipment for use in casting and tabulating votes.
- *Absentee and early voting.* Election officials permit eligible citizens to vote in person or by mail before Election Day.
- *Vote casting.* Election Day activities include opening and closing polling places and assisting voters in casting votes.

¹ GAO, *Elections Federal Efforts to Improve Security and Reliability of Electronic Voting Systems Are Under Way, but Key Activities Need to Be Completed*, GAO-05-956 (Washington D.C.: September 2005).

² Updated using information obtained from reference cited in footnote 1 above.

- *Vote counting and certification.* Election officials tabulate the cast ballots from touch screen machines and release preliminary results to the public on Election Day. Subsequent to Election Day, election officials will tabulate early voting touch screen machine votes and all absentee optical scan ballots. Election officials will determine whether and how to count optical scan ballots that cannot be read by the vote counting equipment. Provisional ballots were manually counted by a Provisional Counting Board. The Davidson County Election Commission will certify the final vote counts, and perform recounts, if required.
- *Voter history.* Election officials maintain a history of voting participation using the *Election Systems and Software Megaprofile* system. For primary elections the voter declared political party is recorded.

The Administrator of Elections keeps voter registration records, maintains voting histories for each voter, and provides information concerning voter registration, absentee voting, elections, campaigns, and campaign financial disclosures. The Administrator of Elections also qualifies prospective candidates for ballots and trains poll officials.

Voting machine warehouse employees, separate from the Administrator of Elections, store voting machines and perform maintenance on the machines year round. They prepare voting machines for elections and work to obtain suitable voting locations. Warehouse employees are also involved in designing ballots, conducting elections, and tallying machine recorded election results.

Locations

The Davidson County Election Commission maintains offices in three locations.

- Metro Office Building – Main Office
- Voting Machine Warehouse
- Metro Southeast Complex – Poll Recruiting and Management

Organizational Structure

The Davidson County Election Commission is governed by five commissioners appointed by the State Election Commission for a two year term. The commissioners are charged with ensuring compliance with state election laws and operating within Metro Nashville's purchasing and budgetary laws. The commission appoints the Administrator of Elections. The Administrator of Elections is responsible for managing all election commission operations and personnel. The Davidson County Election Commission has 20 full-time employees, two part-time employee and during elections several hundred temporary workers to assist with the election process.

The Davidson County Election Commission also approves election plans, certifies election results, and participates in professional

organizations. A diagram of the organization can be seen at Appendix A.

Information Systems

Information systems used at the Davidson County Elections Commission are *EnterpriseOne*, *Election Systems and Software's iVotronic*, *Unity*, and *MegaProfile Voter Registration Election Management* systems.

EnterpriseOne

EnterpriseOne is the primary accounting software system used to record and report all financial reporting transactions for Metro Nashville. The Davidson County Election Commission utilizes *EnterpriseOne* for processing payroll, invoices, and department cost management.

iVotronic Touch Screen Voting System

iVotronic is used on touch screen voting devices to record ballots cast for any given election. It presents to voters election information set-up using the *Unity Election System* software.

Unity Election System

The *Unity™ Election System* is a complete suite of solutions for total election management. The system supports a jurisdiction's election needs, including:

- Creating and maintaining a central database of jurisdiction and election information.
- Formatting ballots and printing ballots on demand.
- Programming election equipment.
- Collecting and reporting election results.

M650 Optical Scanner

The *M650 Optical Scanner* is used to tabulate manual ballots where votes are cast by filling in ovals. This system interfaces with the *Unity Election System* software through zip disks and drives.

MegaProfile Voter Registration Election Management

MegaProfile Voter Registration Election Management software is an integrated suite of programs designed to help automate and protect the integrity of the elections process. It allows election officials to easily perform many election related tasks from processing registrant applications to preparing rosters; from handling absentees to staffing an election; from tracking petitions to storing signature and document images.

Electronic PollBook System ExpressPoll-5000

Electronic PollBook System ExpressPoll-5000 is a combination tablet hardware device and software intended to be used as the official precinct voter list, creation of application for ballot, and voter history

capture. Additional functionality includes voter precinct look-up for all of Davidson County registered voters.

Automated Election System

The system used by the Tennessee Secretary of State as a depository of registered voters state-wide. The Davidson County Election Commission *MegaProfile* system manually interfaces with this system daily.

Financial Information

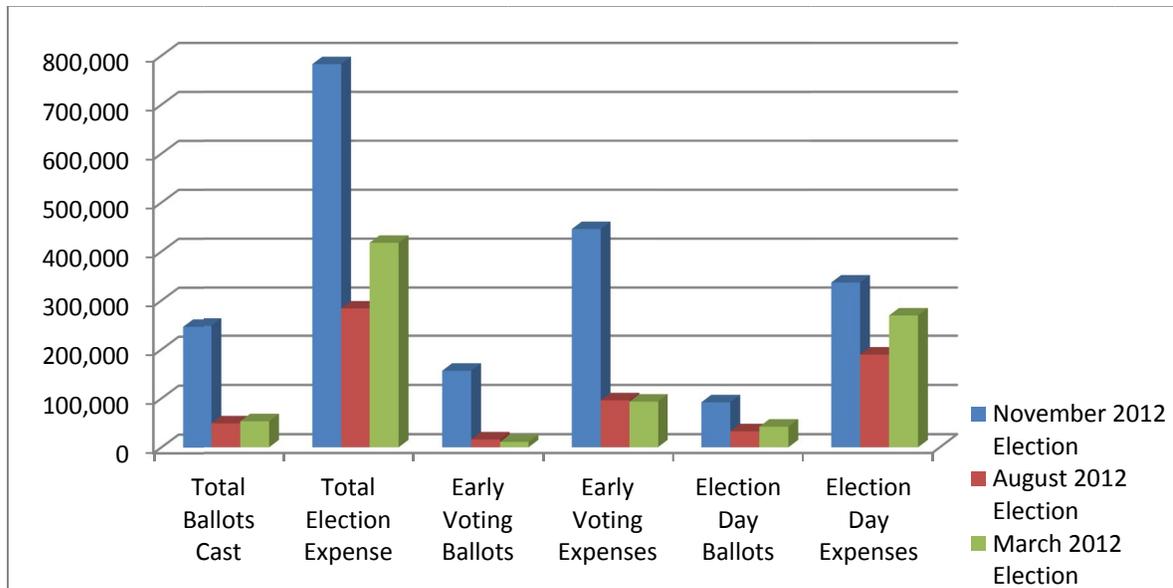
Actual expenditures for fiscal years 2011 and 2012 averaged \$3.3 million. For fiscal year 2012 labor for daily operations accounted for 50 percent or \$1.6 million with an additional \$545 thousand or 17 percent expended for temporary poll workers.

Exhibit A – Davidson County Election Commission – Financial Highlights

	Fiscal Year 2011		Fiscal Year 2012	
	Budget	Actual	Budget	Actual
Revenues & Transfers				
Revenues & Transfers	\$ 28,000	\$ 31,732	\$ 649,200	\$ 442,462
Expenditures				
General Fund	3,610,600	3,330,859	3,983,400	3,260,492
4% Reserve	0	0	405,000	0
Total Expenditures	\$3,610,600	\$3,330,859	\$4,388,400	\$3,260,492

Source: Metropolitan Nashville’s EnterpriseOne Financial System

Exhibit B – Davidson County 2012 Election Comparison Highlights



Source: Davidson County Election Commission

Exhibit C – Top Ten Vendors/Contractors between July 2010 and February 2013

Vendor	Total	Purpose
1. Election Systems & Software Inc	\$1,496,985	Voting management and machine software
2. AXIS Direct	322,147	Voter registration card printing and mailing
3. The Tennessean	161,845	Mandatory election related public notices
4. Ted R Sanders Moving and Warehouse	97,345	Voting machine logistics
5. Ricoh USA	62,012	Printing and copier services
6. Inclusion Solutions LLC	23,380	Printing and binding
7. A Z Office Resource Inc	21,246	Office Supply
8. Advertising Vehicles	15,370	Election Advertisement
9. Athens Paper Co.	13,454	Printing/Binding
10. Nashville Electric Service Co	13,001	Electric bills

Source: Metropolitan Nashville's EnterpriseOne Financial System

OBJECTIVES AND CONCLUSIONS

1. *Were controls to ensure the integrity of the election process efficient and working as management intended?*

Yes. The Office of Internal Audit staff attended poll worker training, reviewed controls surrounding voter registration, voter machine maintenance, security, and election canvassing with the following observations impacting the overall conclusion.

The management of the Davidson County Election Commission was actively engaging staff and third parties to identify potential areas for improvements in future elections. Staff self-review and third party election observers identified several areas for potential improvement from the November 2012 Election Day. Precinct boundary changes along with a high number of voters requiring change of addresses, shortage of pre-printed forms, shortage of poll workers, shortage of parking, and shortage of central office phone trunk lines aggravated customer service for the November 2012 Election Day. The November 2012 election was still achieved, notwithstanding these challenges.

Election Process Controls

Employee Talent - The Davidson County Election Commission has a competent and experienced staff familiar with the election process. Additionally, poll workers were provided detail training and written desk guides to help ensure procedures were followed. Poll workers for the November 2012 Election Day were understaffed by over 100 workers. The Davidson County Election Commission continues to face difficulties in recruiting poll workers (see Observations A).

Voter Registration – The voter registration list was updated from information provide by the Tennessee Secretary of State related to voter's registration in other counties, deaths, felony convictions, or registration in 21 other states. A review of the daily transactions required to be submitted to the Tennessee Secretary of State Election Division was conducted from January 2011 to January 2013. No exceptions were noted.

A confirmation of address was sent to voters whose voter registration card was returned by the United States Postal Service to the Davidson County Election Commission. This process to improve the accuracy of voter records was delayed until after the November 2012 election because of instructions received from the Coordinator of Elections for the Tennessee Secretary of State. A random sample of 50 addresses were reviewed to ensure that *MegaProfile* had been programed to assign the correct voting precinct, council district, school board district, state senate district,

state house district and US congressional district. No exceptions were noted.

Also, similar information was provided from the Davidson County Criminal Clerk's Office and the Metropolitan Nashville Public Health Department. The *MegaProfile* system will automatically create a letter to be sent to voters, whose voter status has been changed for moving out of county, moving out of state, or a felony conviction. A random sample of 50 records purged within *MegaProfile* was reviewed to ensure that there was supporting documentation for the purge. No exceptions were noted. Even though the *MegaProfile* system can provide an audit trail of changes made to voter registration information, the log was not being used to verify all changes were accurate (see Observation A).

Controls to help ensure registration forms issued by third party voter registration groups were returned for processing did not exist. Also, confirmation procedures to help ensure voters registering at Department of Safety locations were processed completely by the Davidson County Election Commission did not exist (see Observation A).

The *MegaProfile* software release 2.4 used by Davidson County Election Commission for maintaining voter registration information and voter history was approved for use in the State of Tennessee.

A review of security roles was conducted for the *MegaProfile* system to ensure that employee security rights were based on business needs to perform their daily functions. Some issues in user logical access to the system were found (see Observations A and B).

Voter Machine Maintenance – The *iVotronic* voting machine version 9.1.4 and *Unity* software system release 5.2.4, used by the Davidson County Election Commission, was approved for election use in the State of Tennessee

Davidson County Election Commission machine technicians stated they ran public noticed pre-election tests on all voting machines used in the November 2012 election. Logic and accuracy test were based on relying upon the function built into each voting machine. However, results from these tests were not documented for the November 2012 election. Leading practices advocate, pre-election, day of election, and post-election documented test (see Observation A).

Poll Worker Training – The Office of Internal Audit attended training provided for Officer of Elections, Change of Address Officials, Application Clerks and Precinct Registrars using Paper Poll Books, and Machine Operator training sessions. The training material was planned, professionally delivered, and provided workshops for change of addresses using the electronic poll book for reference.

Vote Casting - Election official issue an *Application for Ballot* after verifying the voter's name was on the *Precinct Poll Book* and the registered voter had not voted early or requested an absentee ballot. Once the voter completes an affidavit of eligibility to participate in the election the voter signs the *Precinct Poll Book* and will be directed to an available voting machine. The machine operator will take the *Application for Ballot* and render the appropriate ballot.

If an eligible voter was not located on a *Precinct Poll Book*, a *Change of Address* form will be completed and the voter provided directions to the correct precinct.

Voters may also be required to complete a *Provisional Ballot* under certain circumstances, such as insufficient voter identification, or voter registration not found on the *Precinct Poll Book*. Additional follow-up by the voter and research by the Davidson County Election staff will take place after Election Day.

The *Application for Ballot* should be initialized by the registrar and the machine operator along with the voter's affidavit signature. Also, the *Precinct Poll Book* should have the voter's signature and registrar's initial to document that the voter completed a ballot on Election Day.

A review of documents from ten randomly selected polling sites showed six out of ten sites with the total number of *Application for Ballots* matching the total number of voters which signed the *Precinct Poll Book*. The other four precincts had differences of more or less than two vote counts. Differences can happen due to voters not signing the *Precinct Poll Book* or voters neglecting to return the *Application for Ballot* to the machine operator.

Early Voting - Early voting sites allow voters to choose whichever location is most accessible to them throughout the county. The early voting period for the November 2012 election took place from Wednesday, October 17, 2012, through Thursday, November 1, 2012. There were twelve early voting sites spread throughout Davidson County and they were typically opened from 8:00 a.m. to 4:30 p.m.

An *Application for Ballot* is printed after verifying the voter's name in the *MegaProfile* system. Once the voter signs the application which serves as an affidavit of eligibility to participate in early voting, the voter will be directed to the next available voting machine. The machine operator will take the *Application for Ballot* and render the appropriate ballot.

Absentee Voting - Individuals who wishes to vote by *Absentee Ballots* must submit a request to election officials. This request must include the individuals name, address, birthday, social security

number, reason for voting absentee, and which election they are requesting to vote in.

Election officials will review the request and supply a voter's affidavit and an absentee ballot to be completed and returned in a pre-address envelope provided. A review of 50 randomly selected voters in *MegaProfile* that were marked as voted absentee was conducted to ensure that the proper request was submitted to election officials and that the individual was a registered voter in Davidson County. No exceptions were noted.

Counting of Votes/Vote Certification - By the end of the Election Day, officials at each polling site record machine public counts from voting machine results tapes to the *Certificate of Results* and approve the results. The voting machine counts will then be transcribed to the *Application for Ballot Report*, where the election officials record the total number of applications issued to voters who voted on machines. The two numbers should be equal.

A review of documents from ten precincts for the November 2012 election showed that five out of ten precincts had the total number of applications matching machine public counts; four precincts had differences of one count. Differences can happen due to voters not casting the final ballot or machine workers neglecting to obtain the *Application for Ballot* from the voter.

One precinct had four application counts more than the machine public counts. Further investigation showed that one machine was opened around 6:30 p.m. on Election Day and received four votes before being closed. This machine with four votes was not listed on the *Certificate of Results* for the precinct. The Davidson County Election Commission machine technician stated this machine was opened at the precinct because the precinct had a long line before the site was scheduled to be closed at 7:00 p.m. The reconciliation performed by the machine technician as part of the vote certification process detected this discrepancy.

2. *Were fiscal resources such as personnel time, operational expenditures, and capital and tracked assets being managed?*

Generally yes. A review of payroll, timekeeping, purchasing, and procurement card transactions showed that management of the Davidson County Election Commission were being good stewards of funds appropriated to support election activities. However, additional attention to financial controls will help ensure this practice continues.

Procurement

A random sample of 60 purchases was reviewed from the 1,159 purchase made during the 30 month audit scope. Total purchases

were \$1.9 million for this period. Improvements in verification of services and rates were needed (see Observation C).

All 111 procurement card purchases totaling \$18,057 were reviewed. Additional attention to Metro Finance policy was needed (see Observation D).

Payroll

Payroll transactions for all regularly staffed employees were reviewed between January 2012 and December 2012. This review was for exceptions to regular pay (i.e. overtime pay, parking reimbursement, cell phone allowance, etc.). No exceptions were noted.

Payroll transactions for poll-workers were reviewed for the August and November 2012 elections by comparing sign-in sheets to the actual payroll detail. Sign-in sheets were used to ensure only those that actually worked were paid. This review showed some poll-workers were allowed to work before they were officially hired (see Observation E).

A review of the process was conducted and a lack of segregation of duties was identified (see Observation E). The Coordinator of Elections for the Tennessee Secretary of State report will address a similar area of concern related to payroll.

Time and Attendance

Leave accruals were verified for approvals and accuracy between January 2012 and December 2012 for all eligible employees. Leave forms were compared to payroll detail to ensure they were recorded and approved by a supervisor. There were three instances of missing documentation, six instances of leave being entered incorrectly and 49 instances of leave not being properly approved (see Observation E).

Eligibility of employee accrued leave time was also verified along with accrual amounts for vacation, sick, and personal time between July 1, 2012, and January 31, 2013. There were eight employees that had time that was not deducted from their monthly accruals (see Observation F).

Capital and Tracked Assets

Five items on the capital asset listing were not located and documentation of disposal was not available for the items. Also, annual verification of valuable equipment, beside computer workstations, was not practiced (see Observation G).

3. *Have previous audit recommendations from the Tennessee Comptroller's Division of County Audit report Limited Review of Information System Controls dated June 8, 2008, been implemented?*

Generally no. The Tennessee Comptroller's Division of County Audit conducted a limited computer security review in 2008 and made eight recommendations, of which seven were accepted by the previous Davidson County Election Commission Administrator of Elections and one by the Metro Department of Information Technology Services. The current Administrator of Elections was not aware of the 2008 security review report. A review of the status of implementation showed that only two out of the seven accepted recommendations were implemented (see Observation B).

Employees have completed the Metro Nashville Basic Security Awareness Training and earlier this year completed Acceptable Use of Information Technology Assets Policy acknowledgements.

4. *Were the procedures followed in the procurement of the 440 electronic poll books in compliance with Metro Nashville Purchasing Code and Regulations?*

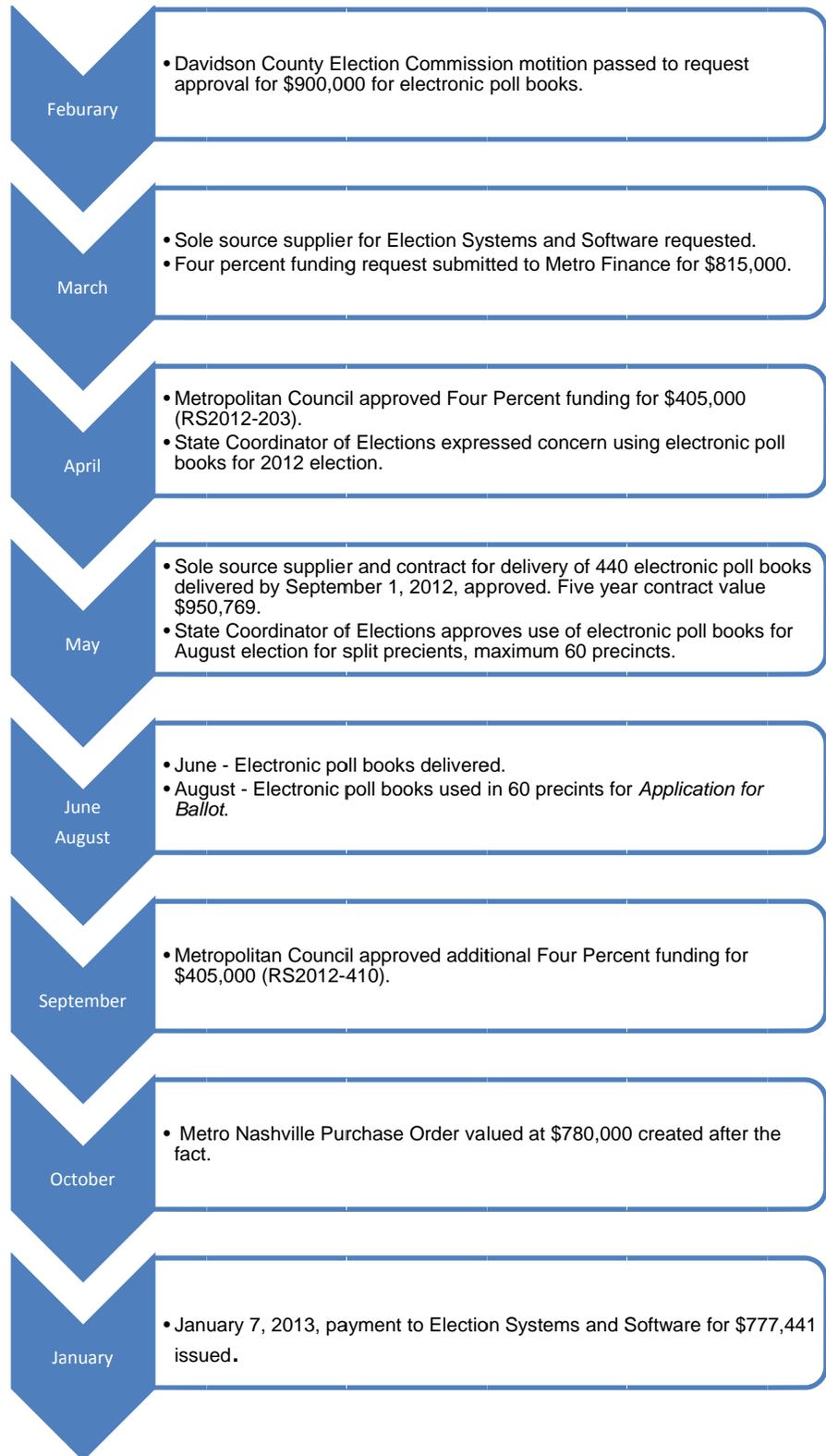
Generally yes. The procurement and contract development process was followed for the purchase of the 440 electronic poll books. However, purchase orders were not used prior to shipment of goods based on available funding. The use of purchase orders helps ensure funds are available prior to the purchase order being approved. Purchase orders are Metro's Purchasing Division preferred method of making purchases (Finance Department Policy, Purchasing # 20).

A sole source justification purchase was approved and a contract solicited for the purchase of 440 electronic poll books in May 2012. The contract terms stated 220 poll books were to be delivered by June 15, 2012, with the remaining 220 poll books to be delivered no later than September 1, 2012. The electronic poll books, except for 300 printers, were received by the Davidson County Election Commission in June 2012. Metro Nashville purchase order number 310033 for this delivery was dated October 30, 2012, three months after delivery.

The contract stated that Metro Nashville assumes no liability for any equipment or software delivered without a purchase order. Also, contract Section XII – Termination, paragraph B – Lack of Funding states:

“Should funding for this contract be discontinued, METRO shall have the right to terminate the contract immediately upon written notice to CONTRACTOR. METRO shall pay CONTRACTOR for all products delivered and services provided up through the effective date of termination.”

Exhibit D – Electronic Poll Book Purchase Timeline – February 2012 to January 2013



5. *Describe the events and cause of the issue related voter history errors identified by the use of electronic poll books in the August 2012 primary election.*

The Coordinator of Elections for the Tennessee Secretary of State report will address this area of concern.

6. *Was the methodology for determining the allocation of voting machines and voting supplies (provisional ballots, change of address, ballot applications, disability forms, etc.) per precinct for the November 2012 presidential election reasonable?*

The Coordinator of Elections for the Tennessee Secretary of State report will address this area of concern.

OBSERVATIONS AND RECOMMENDATIONS

A –Emerging Election Process Risks

Management of the Davidson County Election Commission was actively engaging staff and third parties to provide potential areas for improvements in the election process. Contribution of lessons learned came from staff self-review and third party election observers. Based on literature research, review of audit reports, and observation of the Davidson County Election Commission processes, emerging risks and/or opportunities for improvement in the election process were observed as follows:

Voter Registration

- Provide a confirmation receipt for in-person registration at the Davidson County Election Commission office.
- Log number of registration forms provided to third party registration groups to help ensure all completed forms are returned.
- Add the recommended quantity of forms to the precinct supply check lists.
- Review all changes to a voter status within the *MegaProfile* application using the system audit trail.
- Monthly obtain a list of new registered voters flagged at Department of Motor Vehicle locations and reconcile this list to registered voters in the *MegaProfile* application.
- Add an effective date to the voter registration card.
- Review the logical security for the *MegaProfile* and *Unity* applications to ensure least privileges are implemented whenever practicable.
- Coordinate with Election Systems and Software to determine if additional security features can be implemented in *MegaProfile*.

Vote Counting and Certification

- Ensure total reported voter counts are consistent between the Tennessee Secretary of State and Davidson County Election Commission internet sites.
- Enhance election canvassing documentation by creating a cross-walk between Certification of Results and vote tally sources.

Vote Casting

- Coordinate with Metro Nashville management the possibility of creating a trained employee pool from Metro Nashville entities to serve as contingency and/or supplement for Election Day poll workers.
- Continue to find accessible voting locations with ample parking.

- Develop logic and accuracy testing scripts to ensure *iVotronic* voting machines work as intended for pre-election and post-election machine testing. Test results should be retained for the same period as other election related documents.
- Develop acceptance testing scripts to ensure critical functionality works as management intended for changes to electronic poll books, *Unity*, and *MegaProfile* software functionality.
- Establish advocacy programs to promote the efficiency and reliability of electronic poll books, and voter change of address processing requirements.
- Ensure an independent review and verification of direct reporting electronic ballot design is performed prior to submission for review with the State Coordinator of Elections.

Other

- Utilize *EnterpriseOne* job costing functionality to track cost associated for individual elections.

Other practices that would require additional legislation and/or voter paradigm change include internet self-registration or change of address, elimination of voter registration list and/or voter history requirements, allow same day of election voter registration, primarily use vote by mail for conducting elections, or establish change of address election deadlines.

Criteria:

- U.S. Election Commission, Election Management Guidelines.
- Prudent Customer Service.
- Continuous Quality Improvement Practice.

Risk:

- Citizens could be disenfranchised from participating in the democratic process.
- Individuals could be allowed to participate in the election process when not qualified to do so.

Recommendation:

Management of the Davidson County Election Commission should continue the practice of self-evaluation and improving the election processes by continuously reviewing election risks along with opportunities for improvement.

B - Prior Audit Recommendation Implementation

The Tennessee Comptroller's Division of County Audit conducted a limited computer security review in 2008 and made eight

recommendations, of which seven were accepted by previous Davidson County Election Commission Administrator of Elections and one by the Metro Department of Information Technology Services. The current Administrator of Elections was not aware of the 2008 security review report. A review of the status of implementation showed that only two out of the seven recommendations were implemented

These recommendations can be summarized into two broader categories, information security and business continuity.

Information Security (Included in all recommendations except recommendation two):

The existing user logic access rights to the voter registration program *MegaProfile* was cumbersome and redundant in user group definitions and permission assignments. Three users were assigned with supervisor rights which were not necessary for the user's daily operation. Two users were found not needing access in the system. Users were assigned to multiple groups resulting in extended application privileges which were not all needed for daily operation. There were also several generic accounts set up which decreases the accountability of the users using these accounts.

MegaProfile has an audit function to identify changes made to each record. Management of the Davidson County Election Commission was not reviewing this report for validation.

Metro Nashville had an Acceptable Use of Internet Policy at the time of the prior audit. This policy has been revised since then. None of the employees interviewed were aware of the existence of the policies, nor remember signing the Acceptable Use of Information Technology Assets Policy at the time of the audit. Employees have completed the Metro Nashville Basic Security Awareness Training and earlier this year completed Acceptable Use of Information Technology Assets Policy acknowledgements.

Since the last audit, Metro Information Classification Policy and Information Labeling and Handling Policy were developed. The Davidson County Election Commission did not have a formal classification of information that the staff handled every day. Confidential information, such as voters' social security number was handled based on employees' self-consciousness in information security.

Business Continuity and Disaster Recovery (recommendation two):

Several employees did not know the existence of a business continuity and disaster recovery plan. The existing plan was developed in 2007 and revised in 2008 after the prior audit. This plan was developed using the framework provided by Metro Nashville's General Services Department. While the plan did provide procedures to prepare for occurrences of some natural disasters, it did not address risks which might hinder the mission of the Davidson County Election Commission,

such as the loss of election results due to unforeseeable interruptions on election days, or if an election could not be conducted on scheduled days due to natural or human disasters.

Criteria:

- Limited Review of Information System Controls, May 2008, Tennessee State Comptroller of the Treasury.
- Metro Nashville Information Classification Policy, Information Labeling and Handling Policy, and Acceptable Use of Information Technology Assets Policy.
- Prudent business practice.

Risk:

- Lack of formal policy and procedure, and employee awareness regarding confidential information handling might result in misuse of confidential information.
- Without properly designed business continuity plan and disaster recovery plan, and employee awareness of the plan, Davidson County Election Commission's mission might be hindered when unforeseeable incidents occur.

Recommendation:

Management of the Davidson County Election Commission should:

1. Incorporate a component of information security procedure into its existing Human Resources manual to define public and confidential information in accordance with Metro Nashville's Information Classification Policy. The manual should provide instructions on how to handle these types of information.
2. Assign user access rights to computer systems (*MegaProfile, Unity, and Electronic Poll Book*) based on business functions and ensure least privilege.
3. Incorporate information security training into poll worker training manuals.
4. Periodically review transactions within MegaProfile for accuracy and supporting documentation.
5. Review the existing Business Continuity and Disaster Recovery plan so that it is aligned with Davidson County Election Commission's mission statement. The following items should be addressed in the plan:
 - Loss of election results due to unforeseeable interruptions.
 - Procedures if an election could not be conducted on scheduled days due to natural or human disasters.
 - Assign specific responsibilities to specific functional positions in the department

- A schedule for plan review and training. The plan should be made known to all employees to be effective when needed.
 - Relevant procedures should be incorporated into poll worker training materials.
6. Coordinate with Election Systems and Software to determine if additional security measures can be implemented in the *MegaProfile* system.

C - Improve Procurement Procedures

Verification of services and rates was not consistently being performed prior to payment for goods and services. A random sample of 60 purchases was reviewed from the 1,159 purchase made during the 30 month audit scope. Total purchases were \$1.9 million for this period. Areas of concern from this review were as follows:

- Purchase orders were not consistently created and used prior to procurement of goods and services.
- Documentation was not available demonstrating that payments for 19 polling sites were verified against a listing of polling sites used for the November 2012 election.
- An updated Letter of Delegated Purchasing Authority was not on file with Metro Nashville's Procurement Division prior to February 2013. An updated Letter of Delegated Purchasing Authority was processed after this issue was brought to the Administrator of Election attention.

Criteria:

- Metropolitan Nashville Finance Purchasing Policy Number 20, Purchasing Policy, states a Purchase Order is the preferred method of making purchases.
- Metropolitan Nashville Finance Delegation of Purchase.

Risk:

With lack of proper management oversight, the risk of misappropriation of Metropolitan Nashville assets increases.

Recommendation:

Management of the Davidson County Election Commission should:

1. Utilize purchase orders prior to purchases and ensure funds are available for services or goods ordered.
2. Ensure goods or services are received, and rates align with agreed upon terms prior to payment for goods or services.
3. Ensure a Letter of Delegated Purchasing Authority remains on file whenever a new Administrator of Elections takes office and all purchases abide by the dollar limit thresholds for delegated

purchasing authority outlined in Metro Nashville's Procurement Code.

D – Improve Metro Procurement Card Procedures

Management control to prevent potential abuse of procurement card usage should be improved. All 111 procurement card purchases for 30 months totaling \$18,057 were reviewed and the following issues were observed:

- No evidence of preapproval or post approval was presented for 103 purchases, although each purchase was reviewed by the Finance Manager.
- The individual purchase limit of \$250 was exceeded on 20 purchases totaling \$11,181, or 18 percent of all procurement card purchases.
- Two receipts were missing.
- Documentation listing participants for 33 food purchases totaling \$5,512 was unavailable. However, the Administrator of Election had approved, in writing, food purchasing as “special events” for Election Days where “work and lunch” was needed.
- Sales taxes were paid on eight purchases with total sales tax of \$44.

Criteria:

- Metropolitan Nashville Finance Policy #19 – Credit Card, Section 6 states:
 - d) *Each charge shall be reviewed and approved by the Department Head or designee who does not have a credit card. If the Department Head is a cardholder their charges shall be reviewed by the Finance Department Director or designee.*
 - e) *Documentation supporting charges to the credit card should be readily available for review by the Internal Audit Staff and/or the Department of Finance’s Office of Financial Accountability staff or their designees.*
- Metro Nashville Finance Delegation of Purchase.

Risk:

With lack of proper management oversight, the risk of misappropriation of Metro Nashville assets increases.

Recommendation:

Management of the Davidson County Election Commission should align procurement card practices with Metro Finance Policy # 19, Credit Card Policy by:

1. Ensuring all credit card purchases are approved within the authority delegated by the Metro Nashville Purchasing Agent.
2. Instructing cardholder to retain all receipts and document the government service delivery purpose for credit card purchases.
3. Attaching documents required for all purchases from local restaurants.

E - Strengthen Controls for Payroll Entry and Leave Approval

The duties of recruiting, hiring, assigning, and approving payroll for poll-workers were not segregated. The same employees that were tasked with recruiting and hiring poll-workers also informed the Finance Manager who should be paid and the amount to be paid.

The lack of segregation of duties also attributed to assigning poll-workers before they were officially hired. The Office of Internal Audit reviewed poll-worker payroll detail in *EnterpriseOne* to ensure only poll-workers that signed-in on timesheets located at poll locations were paid. Several poll-workers were not paid during the initial payroll to cover poll-workers. Davidson County Election Commission staff stated that those employees did not turn in the necessary paperwork to be officially hired by Metro Nashville.

Davidson County Election Commission guidelines requires all paperwork to be submitted before an individual is allowed to work the polls however since the same employees hire and assign the employees this requirement can be circumvented. It should be noted that Tennessee Election Code allows for same day appointment of election officials to cover for missing workers.

Also, a sample of 420 “exceptions” to standard payroll was traced back to supporting documents with the following results.

- 49 instances or (11 percent) where supervisory signatures were not obtained to document approval for leave time.
- Three instances of missing documentation.
- Six instances of the leave being entered into *EnterpriseOne* incorrectly.

Criteria:

- Prudent business practice.
- Davidson County Election Commission Guidelines.

“If you do not send copies of the following documents, you will not be able to work: 1. A copy of your signed Social Security Card and 2. A copy of your valid TN Driver License”

- *Tennessee Code Annotated § 2-7-105(b)(1), Election Officials, Vacancies, Administration of Oath, Compensation, states:*

“If any election official fails to appear at the polling place, the officer of elections or, in such officer's absence, a majority of the election officials attending shall select other persons to fill the vacancies. The persons selected shall be registered voters of the county for which they are to serve. Any person selected to fill a vacancy shall be, to the extent practicable, of the same political party as the person in whose place such person was selected.”

- *Internal Control and Compliance Manual for Tennessee Municipalities, Title 5 Control Activities, Chapter 1, Section 1 states:*

"Municipal officials should separate duties of employees so that no one person has control over a complete transaction from beginning to end. Work flow should be established so that one employee's work is automatically verified by another employee working independently. When possible, different persons should be responsible for the authorization, recordkeeping (posting), custodial (cash and materials handling), and review procedures, to prevent manipulation of records and minimize the possibility of collusion."

Risk:

- The risk of improper payment for work not rendered increases without proper segregation of duties.
- The risk of abuse of leave policies increases when requests for time off are not properly approved.

Recommendation:

Management of the Davidson County Election Commission should:

1. Segregate the recruiting and hiring of poll-workers from payroll functions.
2. Ensure all employees are officially hired before they are allowed to work whenever practicable.
3. Ensure leave requests are properly reviewed and approved by a supervisor.

F – Tracking of Leave Balances

The Davidson County Election Commission voluntarily follows the Metropolitan Nashville Civil Service Rules when it comes to attendance and leave policies. The office had controls in place to ensure proper procedures were being followed by each employee. However, differences in leave balances reported by the Davidson County Election Commission and audit recalculations were observed for eight employees. The employee leave time was recorded in *EnterpriseOne* but not updated on monthly accrual spreadsheets for the employee.

A part-time employee's only responsibility was to update each employee's monthly accrual spreadsheets based on the payroll detail

entered into *EnterpriseOne*. The *EnterpriseOne* system will automatically keep track of each employee's accruals if a beginning balance is provided. Utilizing this existing feature of *EnterpriseOne* would allow this employee to be repurposed for other needed tasks.

Criteria:

Metropolitan Nashville Civil Service Rules, Chapter 4 – Attendance and Leave

Risk:

Inconsistent tracking leave balances for employees could cause Metro Nashville to pay employees twice for benefits already taken or could cause additional liability because employees did not receive all the benefits they were entitled too.

Recommendation:

Management of the Davidson County Election Commission should:

1. Work with the Metro Nashville Finance Department, Division of Account to start tracking leave accruals through *EnterpriseOne*.
2. Periodically review leave balances for accuracy and validity of leave information.

G – Maintenance of Asset Records

During a physical inventory of items listed on the Metro Nashville Finance Department Capital Asset listing, only four of nine items were located at the Davidson County Election Commission offices. Items not located primarily included information technology hardware such as a Dell PowerEdge Rack, Cisco Router, Xerox Digital System, etc. Management of the Davidson County Election Commission was unable to locate documentation indicating the disposition or current location for these asset items.

Also, a listing of equipment not meeting the capitalization threshold of \$5,000 and may be considered items subject to theft, such as computer printers was not maintained. A listing of computer workstations and laptops assigned to the office was available from Metro Nashville Information Technology Services Department. A sample of ten computer workstations were all observed in the Davidson County Election Commission office.

Criteria:

Metro Nashville's Finance Department Policy #14, Capital Assets states:

“Disposal and transfers of capital assets (non-real Property) must be processed through General Services’ Surplus Property Division, which shall be responsible for notifying the Division of Accounts to the update the related fixed asset master records upon completion of the disposal or transfer.”

“Based upon the transfer forms submitted by departments, the Division of Accounts will transfer capital assets in the centralized accounting system.”

“Tracked Assets are assets with a dollar value below the capitalization threshold of \$5,000 and should be tracked due to grant requirements, items of a sensitive nature, or items subject to theft.”

Risk:

- The security of Metro Nashville assets is compromised when inventory listings are inaccurate.
- Metro Nashville resources may be lost through re-appropriation of assets.

Recommendation:

Management of the Davidson County Election Commission should:

1. Work with the Department of Finance, Division of Accounts to ensure capital assets are tracked throughout the assets life cycle. This would include documentation of permanent or temporary transfers, disposals, and/or write-offs of missing or impaired assets.
2. Annually conduct a physical inventory of capital and tracked asset and communicate result for capital assets to the Department of Finance, Division of Accounts.

GENERAL AUDIT INFORMATION

Statement of Compliance with GAGAS

This audit was conducted from December 2012 to February 2013, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our observations and conclusions based on our audit objectives.

We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

Scope and Methodology

The audit period was primarily between July 1, 2010, and December 31, 2012. The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, conducting interviews, observations, performing substantive tests and tests of internal controls on the entity's financial information, written policies and procedures, contracts and other relevant data.

Criteria

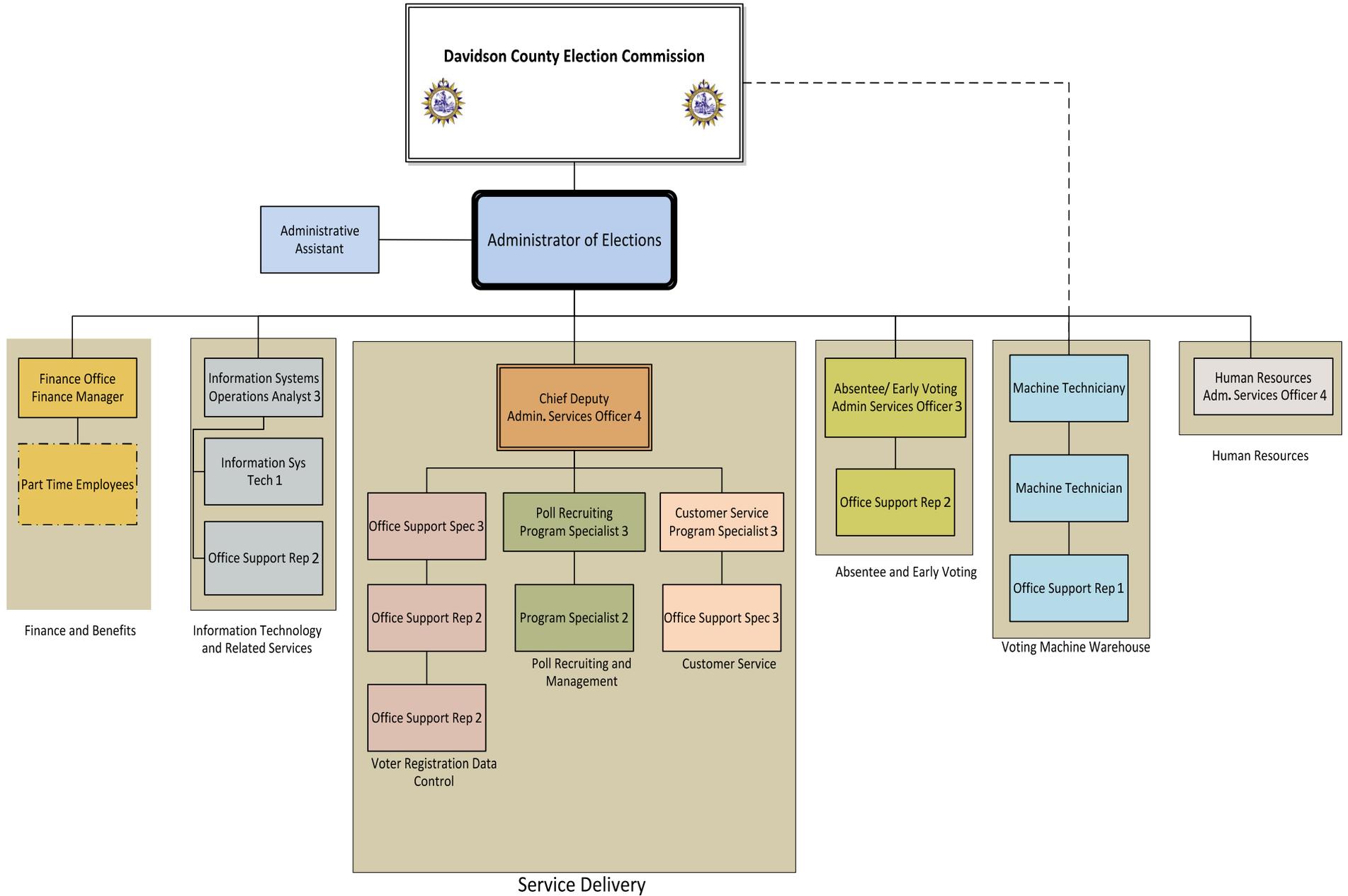
In conducting this audit, the existing processes were evaluated for compliance with:

- *Tennessee Code Annotated, Title 2, Election Laws.*
- *Tennessee Secretary of State, State Coordinator of Elections Rules.*
- *United States Elderly and Handicapped Act of 1984.*
- *United States Help America Vote Act of 2002.*
- *United States National Voters Registration Act of 1993.*
- *United States Uniformed and Overseas Citizens Absentee Voting Act.*
- *United States Voting Act of 1965.*
- *Metropolitan Nashville Finance Policies.*

Staff Acknowledgement

Mark Swann CPA, CIA, CISA, Metropolitan Auditor
Qian Yuan CISA
Tracy Carter CFE

APPENDIX A. ORGANIZATION CHART



APPENDIX B. MANAGEMENT RESPONSE

- Management's Responses Starts on Next Page -

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY



DAVIDSON COUNTY ELECTION COMMISSION
PERMANENT REGISTRATION OFFICE
POST OFFICE BOX 650
NASHVILLE, TN 37202
(615) 862-8800

April 15, 2013

Mr. Mark Swann
Metropolitan Auditor
Office of Internal Audit
Metro Southeast
1417 Murfreesboro Road
Nashville, TN 37217

Dear Mr. Swann,

This letter will confirm that the Davidson County Election Commission has received the audit report issued by the Office of Internal Audit. My Staff and I were pleased with the many positive comments contained in the report in regards to the operation of the Davidson County Election Commission. We also appreciate the professionalism and objectivity you, Qian Yuan and Tracy Carter demonstrated. We acknowledge and agree with the majority of the recommendations contained in the report and have begun the process of putting those recommendations in to practice.

It has been a pleasure working with you and your staff. The manner in which the audit was conducted certainly made this a positive exercise for the Davidson County Election Commission.

Please let me know if you need further assistance.

Best regards,

A handwritten signature in cursive script that reads "A. U. Tieche".

Albert U. Tieche
Administrator of Elections

AUT/cm



**Audit of the Davidson County Election Commission
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation/Action Plan	Assigned Responsibility	Estimated Completion
<p>A. Management of the Davidson County Election Commission should continue the practice of self-evaluation and improving the election processes by continuously reviewing election risks along with opportunities for improvement.</p>	<p>Accept. This process is ongoing and will remain in place.</p>	<p>All</p>	<p>Continuing</p>
<p>B. Management of the Davidson County Election Commission should:</p> <p>1. Incorporate a component of information security procedure into its existing Human Resources manual to define public and confidential information in accordance with Metro Nashville's Information Classification Policy. The manual should provide instructions on how to handle these types of information.</p>	<p>Accept. Include a copy of Metro Nashville's IT Policy in the HR manual.</p>	<p>HR</p>	<p>Completed</p>
<p>2. Assign user access rights to computer systems (MegaProfile, Unity, and Electronic Poll Book) based on business functions and ensure least privilege.</p>	<p>Accept. MegaProfile will require a new set of groups with redesigned classifications. This will require a two day shut down. Unity currently has only 2 users, the machine technicians. EPB has 2 administrators only.</p>	<p>IT Department</p>	<p>December 2013</p>
<p>3. Incorporate information security training into poll worker training manuals.</p>	<p>Accept. Add Metro's IT Policy document to Early Voting training materials. Election Day workers do not access this information.</p>	<p>Early/Absentee Dept.</p>	<p>February 2014</p>
<p>4. Periodically review transactions within MegaProfile for accuracy and supporting documentation.</p>	<p>Accept. This is done when a voter card is returned, when changes are made, and when scanning cards.</p>	<p>Seventeen staff members have permission to review and change incorrect information.</p>	<p>Ongoing</p>
<p>5. Review the existing Business Continuity and Disaster Recovery plan so that it is aligned with Davidson County Election Commission's mission statement. The following items should be addressed in the plan:</p> <ul style="list-style-type: none"> • Loss of election results due to unforeseeable interruptions. • Procedures if an election could not be 	<p>Partially Accept. Procedures are in place developed by DCEC and Office of Emergency Management to be reviewed and updated.</p> <p>Court order is required to move the date of an</p>	<p>OEM and DCEC</p> <p>Building Captains MOB-Bill Hyden MSE-Gaye Hudson Warehouse-Bobby Medley</p>	<p>June 30, 2013</p> <p>Poll worker training to be updated February 2014</p>

**Audit of the Davidson County Election Commission
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation/Action Plan	Assigned Responsibility	Estimated Completion
<p>conducted on scheduled days due to natural or human disasters.</p> <ul style="list-style-type: none"> • Assign specific responsibilities to specific functional positions in the department • A schedule for plan review and training. The plan should be made known to all employees to be effective when needed. • Relevant procedures should be incorporated into poll worker training materials 	<p>election.</p> <p>Plan to be added to HR manual. Annual review schedule.</p>		
<p>6. Coordinate with Election Systems and Software to determine if social security numbers can be encrypted in the MegaProfile database.</p>	<p>Accept.</p>	<p>IT Department</p>	<p>June 30, 2013</p>
<p>C. Management of the Davidson County Election Commission should:</p> <p>1. Utilize purchase orders prior to purchases and ensure funds are available for services or goods ordered.</p>	<p>Accept. Approved training for movement to IProcurement instead of current voucher payment system.</p>	<p>Finance</p>	<p>ASAP</p>
<p>2. Ensure goods or services are received, and rates align with agreed upon terms prior to payment for goods or services.</p>	<p>Accept. Approved-Study of Contracts, Terms and Policies to be enacted</p>	<p>Finance, Accounts Payable, Contracts, Procurement</p>	<p>Current and on going.</p>
<p>3. Ensure a Letter of Delegated Purchasing Authority remains on file whenever a new Administrator of Elections takes office and all purchases abide by the dollar limit thresholds for delegated purchasing authority outlined in Metro Nashville's Procurement Code.</p>	<p>Accept.</p>	<p>Finance</p>	<p>Completed</p>
<p>D. Management of the Davidson County Election Commission should align procurement card practices with Metro Finance Policy # 19, Credit Card Policy by:</p> <p>1. Ensuring all credit card purchases are approved within the authority delegated by the Metro Nashville Purchasing Agent.</p>	<p>Partially Accept. We moved away from petty cash closing this program. Our credit card purchases follow section 2 (c) of Delegation of Authority.</p>	<p>Finance</p>	<p>Completed</p>

**Audit of the Davidson County Election Commission
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation/Action Plan	Assigned Responsibility	Estimated Completion
2. Instructing cardholder to retain all receipts and document the government service delivery purpose for credit card purchases.	Accept.	Finance	Completed
3. Attaching documents required for all purchases from local restaurants.	Accept.	Finance	Completed
E. Management of the Davidson County Election Commission should: 1. Segregate the recruiting and hiring of poll-workers from payroll functions.	Accept.	HR/ Poll Coordinator	December 2013
2. Ensure all employees are officially hired before they are allowed to work whenever practicable.	Accept. TCA § 2-7-105 allows for emergency hires.	Human Resources, Finance, Poll Coordination	Completed
3. Ensure leave requests are properly reviewed and approved by a supervisor.	Accept.	All management	Completed
F. Management of the Davidson County Election Commission should: 1. Work with the Metro Nashville Finance Department, Division of Account to start tracking leave accruals through EnterpriseOne.	Accept.	Human Resources/Finance	Completed
2. Periodically review leave balances for accuracy and validity of leave information.	Accept.	Human Resources/Finance	Completed
G. Management of the Davidson County Election Commission should: 1. Work with the Department of Finance, Division of Accounts to ensure capital assets are tracked throughout the assets life cycle. This would include documentation of permanent or temporary transfers, disposals, and/or write-offs of missing or impaired assets.	Accept.	IT Department	July 15, 2013

**Audit of the Davidson County Election Commission
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation/Action Plan	Assigned Responsibility	Estimated Completion
2. Annually conduct a physical inventory of capital and tracked asset and communicate result for capital assets to the Department of Finance, Division of Accounts.	Accept.	IT Department	Ongoing